

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**  
**FACT SHEET**

**Proposed Permit Draft Date: April 23, 2009**

Permittee Name: The Santa Ynez Band of Chumash Indians

Mailing Address: P.O. Box 517  
Santa Ynez, California 93460

Facility Location: 3400 East Highway 246  
Santa Ynez, California 93460

Contact Person(s): William Wyatt, Tribal Administrator  
Joshua Simmons, Environmental Manager

NPDES Permit No.: CA0050008

## **I. STATUS OF PERMIT**

The Santa Ynez Band of Chumash Indians, the owners of the Santa Ynez Band of Chumash Indian wastewater treatment plant, has applied for renewal of their National Pollutant Discharge Elimination System (NPDES) permit to allow the discharge of treated effluent from their plant to Zanja de Cota Creek, tributary to the Santa Ynez River located in Santa Barbara County in California.

The permittee is currently discharging under NPDES permit CA0050008 issued on December 13, 2003 and expired on December 12, 2008. Pursuant to 40 CFR 122.21, the terms of the existing permit are administratively extended until the issuance of a new permit.

A complete application was submitted on December 8, 2008. EPA Region IX has developed this permit and fact sheet pursuant to Section 402 of the Clean Water Act, which requires point source dischargers to control the amount of pollutants that are discharged to waters of the United States through obtaining a NPDES permit.

This facility has been classified as a minor discharger.

## **II. GENERAL DESCRIPTION OF FACILITY**

The plant has a capacity of 200,000 gallons per day (gpd). The facility is a tribally-owned wastewater treatment plant that receives domestic wastewater from approximately 350 residents on the reservation and from a 190,000 square foot casino complex and miscellaneous administration buildings. Approximately 6,000 patrons a day visit the casino

complex, making the total population served on an average day to be 6,350. In the most recent year, the plant reported treating an average of approximately 140,000 gpd of wastewater and a maximum of 190,000 gpd from these facilities. This is an increasing trend up from the 2005 flow average of 105,000 gpd and the 2007 average of 123,000 gpd.

Treatment includes head works (sequencing, screening, comminution), extended aeration, sedimentation, chemical coagulation, filtration, disinfection using ultraviolet. Tertiary effluent is primarily discharged directly to Zanja de Cota Creek. Approximately 20-40% of the water, however, is reclaimed depending on reservation water demand. Reclaimed water is kept in storage tanks and habitually fed chlorine before being reclaimed for irrigation or other reservation uses. Sludge is hauled to a licensed waste treatment and compost facility.

### **III. DESCRIPTION OF RECEIVING WATER**

The receiving water for Outfall No. 001 for the permitted facility is Zanja de Cota Creek, tributary to the Santa Ynez River. Approximately 1.3 miles downstream of the outfall point, Zanja de Cota Creek flows off of the reservation and into California state waters in Santa Barbara County.

Because water quality standards have not been established for Zanja de Cota Creek within the reservation, the downstream water standards are applied. The applicable water quality standards for Santa Barbara County are specified in the Basin Plan for the California Regional Water Quality Control Board, Central Coast Region.

The effluent from the discharger should not adversely affect beneficial uses downstream of the discharge point, therefore the applicable water quality standards which have been applied to this water are those for the lower Santa Ynez River, parent river to Zanja de Cota Creek. The beneficial uses designated for the lower Santa Ynez River are listed in Table 2-1 of the California Central Coast Region Basin Plan ("Basin Plan") as MUN, AGR, PRO, IND, GWR, REC-1, REC-2, WILD, COLD, WARM, MIGR, SPWN, RARE, FRSH, and COMM. Applicable narrative water quality standards and numeric water quality standards are described in Section III of the Basin Plan.

### **IV. DESCRIPTION OF DISCHARGE**

The discharge is tertiary treated municipal wastewater. Disinfection is by ultraviolet radiation ("UV") prior to discharge to Zanja de Cota Creek.

Because the effluent is also intended for reclamation, the discharge meets California Code of Regulations- Title 22, Water Recycling Criteria.

### A. Permit Application Summary

As required in sections A.12 and B.6. of form 2A of the permittee's application, the discharger provides effluent testing results for the following parameters and pollutants below:

Parameter	Maximum Daily Value		Average Daily Value		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.93	s.u.			
pH (Maximum)	7.92	s.u.			
Flow Rate	.14	mgd	.10	mgd	334
Temperature (Winter)	26.70	C°	23.50	C°	180
Temperature (Summer)	31.40	C°	26.40	C°	184

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method	ML/MDL
	Conc.	Units	Conc.	Units	Sample size		
BOD-5	12.00	mg/l	.58	mg/l	145	SM5210-B	10/15
Fecal Coliform	30.00	mpn	2.70	mpn	34	SM9221	2.0
Total Suspended Solids (TSS)	12.00	mg/l	2.57	mg/l	145	SM2540D	10/15
Ammonia (as N)	2.30	mg/l	.14	mg/l	34	EPA 350.1	no limit
Chlorine		N/A:	UV disinf				
Dissolved Oxygen	5.89	mg/l	7.03	mg/l	332	SM4500-OG	5.0
Total Kjeldahl Nitrogen (TKN)	2.10	mg/l	.86	mg/l	34	EPA351.2	5.0
Nitrate + Nitrite Nitrogen	18.00	mg/l	3.40	mg/l	34	EPA353.2	5.0
Oil and Grease		NOT	TESTED				no limit
Phosphorus (total)	1.90	mg/l	.83	mg/l	34	EPA365.2	no limit
Total Dissolved Solids (TDS)	950.00	mg/l	648.00	mg/l	34	SM2540-C	no limit

### B. Current Technology-Based Effluent Limitations

The technology-based effluent limits assigned in NPDES Permit CA0050008 issued on December 13, 2003 are stated below:

**Table 1. Previous Permit Term Technology-Based Effluent Limitations**

Effluent Characteristic	Discharge Limitations						Monitoring Requirements	
	Mass limits			Concentration limits				
	Average		Daily Maximum	Average		Daily Maximum	Measurement Frequency	Sample Type
Monthly	Weekly	Monthly		Weekly				
Flow (MGD) <sup>(5)</sup>	N/A <sup>(1)</sup>	N/A	0.20	(2)	N/A	(2)	Once/day	Composite or Discrete
Ammonia (as N)	(2)	N/A	(2)	(2)	N/A	(2)	Once/month	Discrete

Biochemical Oxygen Demand (5-day) <sup>(3)</sup>	7.6 kg/day	11.35 kg/day	22.7 kg/day	10 mg/L	15mg/L	(2)	Once/week	Composite
Fecal Coliform Bacteria	N/A	N/A	N/A	2.2 MPN/ 100 ml	N/A	2.2 MPN/ 100 ml	Once/month	Discrete
Total Nitrogen (as N)	(2)	N/A	(2)	5 mg/L	N/A	7.5 mg/L	Once/month	Discrete
Total Residual Chlorine (TRC)	(2)	(2)	(2)	(2)	(2)	(2)	(4)	Discrete
Suspended Solids <sup>(3)</sup>	7.6 kg/day	11.35 kg/day	22.7 kg/day	10 mg/L	15mg/L	(2)	Once/week	Composite
Total Phosphorous (as P)	(2)	N/A	(2)	(2)	N/A	(2)	Once/month	Discrete
pH	Not less than 7.0 standard units and not greater than 8.3 standard units. The discharge shall not cause the pH of the receiving water to change more than 0.5 standard units.						Once/day	Discrete

- (1) N/A = Not Applicable
- (2) Monitoring and reporting required. No limit set during this permit term.
- (3) Both the influent and the effluent to be monitored. The arithmetic mean of the Biochemical Oxygen Demand (5-day) by concentration, for effluent samples collected in a period of 30 consecutive calendar days not to exceed 15 percent of the arithmetic mean of the values, by concentration, for influent samples collected at approximately the same times during the same period.
- (4) TRC to be monitored at weekly intervals to verify adequate removal of chlorine prior to discharge to the receiving water or reuse, when chlorine is used to disinfect the effluent.
- (5) Flow is defined as "Maximum annual dry weather design capacity."

### C. Discharge Monitoring Report (DMR) Summary

Discharge Monitoring Reports ("DMRs") were reported every month characterizing pollutant and effluent discharge. Exceedances to effluent limitation are noted below:

1. **Total Nitrogen:** According to the DMRs, total nitrogen concentration limits were exceeded on eight occasions between 2004 and 2006. Each time the limit for nitrogen was exceeded the discharger notified EPA Region 9's Clean Water Act Compliance Office. After consultation with the EPA, the discharger purchased a nitrogen testing kit for internal sampling in order to determine trends in nitrogen during operation of the plant and adjusted treatment accordingly. Since the consultation, the discharger has not reported nitrogen levels above the permit limit.
2. **Fecal Coliform:** According to the DMRs, the allowable concentration of fecal coliform bacteria was exceeded once in June of 2007. The discharger's notes indicated the high fecal coliform bacteria count may have been due to sampling error.
3. **pH:** Effluent limitations require the pH to be no less than 7.0 and no greater than 8.3 standard units (s.u.). According to the data received from the DMRs, the lower limit

of 7.0 s.u. was violated on two occasions between 2005 and 2006. The lowest recorded value of pH during the permit cycle was 6.93 s.u.

## **V. SIGNIFICANT CHANGES FROM PREVIOUS PERMIT**

Significant changes from the previous permit include:

- New limits and monitoring requirements on turbidity and total coliforms consistent with California Title 22 guidelines for re-use of treated effluent. (See Section I.B. of permit)
- A new limit on settleable solids (I.B.)
- A new monitoring and reporting requirement for oil & grease (I.B.)
- Regular monitoring and reporting of effluent, downstream and upstream temperature. (I.B., II.B.1.).
- Adjustments to monitoring frequency of certain parameters indicated in Table 2 of the permit (II.B.1.).
- A requirement of a formal investigation into potential sources of elevated Total Dissolved Solids concentrations (II.B.2).

## **VI. DETERMINATION OF EFFLUENT STANDARDS**

Section 301(a) of the Act provides that the discharge of any pollutant to waters of the United States is unlawful except in accordance with an NPDES permit. Section 402 of the Act establishes the NPDES program. The program is designed to limit the discharge of pollutants into waters of the U.S. from point sources (40 CFR 122.1 (b)(1)) through a combination of various requirements including technology-based and water quality-based effluent limitations.

Unless otherwise noted, the following permit requirements must be met when discharging.

### **A. Narrative water quality standards**

As stated in Water Quality Control Plan for the State of California, Region 3, Water Quality Control Board, the following narrative water quality standards apply:

1. Waters shall not contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses;
2. Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses;

3. Water shall be free of discoloration that causes nuisance or adversely affects beneficial uses;
4. Water shall not contain floating material in amounts that cause nuisance or adversely affect beneficial uses;
5. Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses;
6. No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses;
7. Radionuclides shall not be present in concentrations that are harmful to human, plant, animal, or aquatic life nor result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life;
8. The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses;
9. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affect beneficial uses;
10. Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses;
11. The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of EPA that such alteration of temperature does not adversely affect beneficial uses;
12. All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal or aquatic life. This objective applies whether the toxicity is caused by a single substance or the interactive effect of multiple substances. Compliance with this objective will be determined by analyses of indicator organisms, species diversity, population density, growth anomalies, and biotoxicity tests of appropriate duration or other methods as specified by EPA;
13. Waters shall not contain taste or odor producing substances in concentrations that impart undesirable tastes or odors to domestic or municipal water supplies or to fish or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses;
14. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses;

## B. Applicable Numerical Effluent Limitations

When the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a numeric criterion for a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant.

EPA evaluated the typical pollutants expected to be present in the effluent and selected the most stringent of applicable technology-based standards or water quality-based effluent limitations. Where effluent concentrations of toxic parameters are unknown or are not reasonably expected to be discharged in concentration that have the reasonable potential to cause or contribute to water quality violations, EPA may establish monitoring requirements in the permit. Where monitoring is required, data will be re-evaluated and the permit may be re-opened to incorporate effluent limitations as necessary.

**Table 1** in Section IV.(B) of the fact sheet summarizes the status quo of technology-based effluent limitations as well as the proposed technology-based effluent limitations for Outfall No. 001. When properly operated, this wastewater treatment system should meet the limitations in **Table 1** as well as the limitations listed below:

Concentration and Mass Based Effluent Limits				
	30-day Average	7-day Average	Daily Maximum	Removal Efficiency
BOD <sub>5</sub> <sup>(2)</sup>	10 mg/l	15 mg/l		85 % minimum
	16.69 lbs/day	25.04 lbs/day	50.08 <sup>(1)</sup> kg/day	
Total Suspended Solids (TSS) <sup>(2)</sup>	10 mg/l	15 mg/l		85 % minimum
	16.69 lbs/day	25.04 lbs/day	50.08 <sup>(1)</sup> kg/day	
Total Nitrogen <sup>(2)</sup>	5 mg/l	N/A	7.5 mg/l	
	8.34 lbs/day	N/A	12.52 lbs/day	

(1) Daily maximum based on Best Professional Judgment: Daily Mass Maximum= 2 X (7-day average).

(2) Based on **Table 1**, Section IV(B) of fact sheet.

Concentration Based Effluent Limits	
	Instantaneous Maximum
pH <sup>(3)</sup>	Must be in the range of 7.0 to 8.3 standard units and not cause the pH of the receiving water to change more than 0.5 standard units.
Total Coliform <sup>(4)</sup>	Must have a 30-day geometric mean as well as single-sample maximum of 2.2 MPN/100 ml

(3) Based on California Regional Board 3, Basin Plan

(4) Based on California Code of Regulations Title 22 standard for re-use of treated effluent.

Concentration Based Effluent Limits		
	30-day Average	Daily Maximum
Settleable Solids <sup>(5)</sup>	1 ml/l	2 ml/l
Turbidity <sup>(4)</sup>	2 NTU	5 NTU

(4) Based on California Code of Regulations Title 22 standard for re-use of treated effluent.

(5) The minimum levels of effluent quality attainable by secondary treatment for Settleable Solids, as specified in the EPA Region IX Policy memo dated May 14, 1979

Therefore, effluent limits for BOD<sub>5</sub>, TSS, total Nitrogen, pH, Total Coliform, Turbidity and Settleable Solids are established in the permit as stated above.

### C. Rationale for Effluent Limits

#### *Flow.*

Based on the design of the plant, flow shall not exceed a daily maximum of 200,000 Gallons per Day.

#### *BOD<sub>5</sub>, TSS, and total Nitrogen*

Limits for total BOD<sub>5</sub>, TSS, and total Nitrogen are established for POTWs as described in the Basin Plan, Section II.A.2. Under 40 CFR Section 122.45(f), mass limits are also required for BOD<sub>5</sub>, TSS, and total Nitrogen. Based on the design flow, the mass based limits are based on the following calculations:

#### Average Monthly Mass Limits:

Parameter	Design Flow (daily average)	Average Monthly Concentration Limit	Conversion factor	Monthly Average Mass Limit
BOD/TSS	.2 mgd	10 mg/l	8.345	16.69 lbs/day
Nitrogen	.2 mgd	5 mg/l	8.345	8.34 lbs/day

#### Average Weekly Mass Limits for BOD<sub>5</sub> and TSS:

Design Flow (daily maximum)	Average Weekly Concentration Limit	Conversion factor	Weekly Average Mass Limit
.2 mgd	15 mg/l	8.345	25.04 lbs/day



**Average Daily Mass Limits for Nitrogen:**

Design Flow (daily maximum)	Average Weekly Concentration Limit	Conversion factor	Weekly Average Mass Limit
.2 mgd	7.5 mg/l	8.345	12.52 lbs/day

*Turbidity*

20-40% of the wastewater is reused and it is EPA's best professional judgment (BPJ) that the treatment technology used by the permittee be expected under normal operating conditions to meet California Title 22, tertiary standards for reclamation of water ("Title 22"). The limits in this permit are consistent with the goal established in Title 22., i.e. 2 NTU monthly average and 5 NTU daily maximum. The Permit monitoring frequency for this parameter is continuous and is also consistent with Title 22.

*Total Coliform Bacteria*

Pursuant to Title 22, tertiary disinfection standards for the re-use of wastewater, effluent total coliform levels must not exceed 2.2MPN/ 100mL in a 7-day median. This is consistent with the California Central Coast Water Quality Objectives and the limit established in the permit. The Permit monitoring frequency for this parameter is daily and this is also consistent with Title 22 standards.

*pH.*

Based on the reasonable potential analysis, EPA has determined that the discharge has a reasonable potential to cause or contribute adversely to the acidity level of Zanja de Cota Creek. Therefore, the permit requires the pH of the effluent to be within range of 7.0 and 8.3 standard units and alter the pH of the receiving water by no more than .5 standard units as mandated by the, Basin Plan, Section II.A.2.

*Temperature*

Based on the reasonable potential analysis, EPA has determined that the discharge has a reasonable potential to cause or contribute adversely to the temperature of Zanja de Cota Creek. Therefore, this permit requires the temperature of the effluent to be monitored and reported in addition to complying with the narrative requirements mandated by the Basin Plan Section II.A.2. and outlined in the permit under section I.A.3(1).

*Settleable Solids*

The minimum levels of effluent quality attainable by secondary treatment for Settleable Solids are specified in the EPA Region IX Policy memo dated May 14, 1979 and are therefore established in this permit.

*Oil & Grease*

Treated and untreated domestic wastewater may contain levels of oil & grease which may be toxic to aquatic organisms. There are no numeric water quality standards for oil &

grease (only narrative standards which have been incorporated into the permit). Monitoring of oil & grease levels in the effluent has been incorporated to ensure the narrative standards are not exceeded.

#### **D. Anti-Backsliding.**

Section 402(o) of the CWA prohibits the renewal or reissuance of an NPDES permit contains effluent limits less stringent than those established in the previous permit, except as provided in the statute.

The permit does not establish any effluent limits less stringent than those in the previous permit and does not allow backsliding.

#### **E. Antidegradation Policy**

EPA's antidegradation policy at 40 CFR 131.12 and California Water Code (CWC) Sections 13146 and 13247 require existing water uses and the level of water quality necessary to protect the existing uses be maintained.

Due to the low levels of toxic pollutants present in the effluent, high level of treatment being obtained, and water quality based effluent limitations, it is not expected that the discharge will adversely affect receiving water.

### **VII. MONITORING AND REPORTING REQUIREMENTS**

#### **A. Effluent Monitoring and Reporting**

Technology-based and indicator parameters will be monitored to ensure proper operational control of the facility. Turbidity will be monitored continuously, pH will be monitored daily, BOD, oil & grease and suspended solids will be monitored weekly and total coliform and other parameters will be monitored monthly. The permit requires daily flow monitoring and weekly and monthly monitoring for the technology-based parameters. **Table 1** in Section I.B. of the permit also indicates requirements for the type of sample to be collected, i.e., discrete or composite.

Some operationally related parameters will also be monitored to ensure compliance with water quality standards. Monitoring for TRC is proposed at weekly intervals to verify adequate removal of chlorine prior to discharge to the receiving water, when chlorine treatment of the effluent is used.

The permittee shall conduct effluent monitoring to evaluate compliance with the proposed permit conditions. The permittee shall perform all monitoring, sampling and analyses in accordance with the methods described in the most recent edition of 40 CFR 136,

unless otherwise specified in the proposed permit. All monitoring data shall be reported on monthly DMR forms and submitted quarterly as specified in the proposed permit.

## **B. Priority Toxic Pollutants Scan**

A Priority Toxics Pollutants scan shall be conducted within ninety (90) days of the date of issuance of the permit to ensure that the discharge does not contain toxic pollutants in concentrations that may cause a violation of water quality standards. The permittee shall perform all effluent sampling and analyses for the priority pollutants scan in accordance with the methods described in the most recent edition of 40 CFR 136, unless otherwise specified in the proposed permit or by EPA. 40 CFR 131.36 provides a complete list of Priority Toxic Pollutants.

## **C. Whole Effluent Toxicity Testing**

The permit establishes tests for acute and chronic toxicity.

Acute and chronic toxicity testing evaluates reduced growth/reproduction at 100 percent effluent. Acute and chronic toxicity is to be reported based on the No Observed Effect Concentration (NOEC). The permittee shall conduct short-term tests with a fish, *Pimephales promelas*, a macro invertebrate *Daphnia magna*, and a plant, *Selanastrum capricornatum*. The presence of chronic toxicity shall be estimated as specified by the methods in the 40 CFR Part 136 as amended on November 19, 2002.

## **D. Additional Monitoring Requirements**

The discharger must conduct monitoring of surface water before and after the effluent discharge point as indicated in **Table 2** below. This monitoring is to ensure that the quality of water that leaves Tribal land is unlikely to impact to drinking water sources downstream of the discharge location. The upstream point of testing shall be at least 100 feet upstream of the discharge point and the downstream testing location shall be at the furthest point of surface water present on tribal land. This point shall be at the Tribal boundary if surface water flows off the Tribal land, or at the point on Tribal land where the flow disappears.

The monitoring for Total Dissolved Solids shall be conducted monthly for a minimum of 12 months. If after 12 months, the TDS does not exhibit a reasonable potential of exceeding action levels, the monitoring frequency may be reduced to once every 6 months.

The monitoring and testing frequency for all other parameters shall be conducted at a frequency of once every 6 months, a reduction of frequency from the initial requirements of the last permit term due to monitoring data consistently below action levels.

The action levels are not permit limits per se, but are levels based on the various beneficial uses of the downstream water, i.e. the Santa Ynez River. The permittee is required to notify EPA if action levels are exceeded, however exceedances do not result in a violation of this permit.

If there is a sewage spill or other upset that is likely to result in release of effluent with concentrations higher than the permitted levels as required in other sections of this permit, the permittee shall conduct testing of all constituents listed in **Table 2.** within 24 hours of such event and shall report the results immediately to EPA as outlined in the permit language.

**Table 2. Surface Water Monitoring**

Effluent Characteristic	Action Level	Monitoring Requirements	
		Measurement Frequency	Sample Type
Alkalinity (as CaCO <sub>3</sub> )	(2)	Once/6-months	Discrete
Fecal Coliform Bacteria	(2)	Once/6-months	Discrete
Total Nitrogen (as N)	(2)	Once/6-months	Discrete
Suspended Solids	(2)	Once/6-months	Composite
Total Dissolved Solids (TDS)	(2)	Monthly	Discrete
Total Phosphorous (as P)	(2)	Once/6-months	Discrete
Methylene Blue Activated Substances	(2)	Once/6-months	Discrete
Phenols	(2)	Once/6-months	Discrete
PCBs	(2)	Once/6-months	Discrete
Phthalate esters	(2)	Once/6-months	Discrete
Temperature	(2)	Once/6-months	Discrete

- (1) N/A = Not Applicable
- (2) Monitoring and reporting required. No limit set at this time. Action levels are set for particular effluent characteristics as follows:  
 Total Nitrogen (as N) 15 mg/L  
 Total Dissolved Solids 700 mg/L  
 Methylene Blue Activated Substances 0.2 mg/L  
 Phenols 0.1 mg/L  
 PCBs 0.3 ug/L  
 Phthalate Esters 0.002 ug/L

## E. Investigation Requirements

Additionally, the permittee is required to conduct an investigation into potential sources of elevated Total Dissolved Solids in the receiving body and the effluent. The discharger was found to have exceedances to the action level in the previous permit cycle. Potential sources were identified, but merely on a speculative basis. In conducting a formal investigation, the

discharger will be able to develop and adopt best management practices in order to reduce the increase in concentration of TDS in the receiving water body.

Potential focuses for investigation should include, but are not limited to:

- Comparison of upstream and source water to downstream and treated effluent.
- Consideration of impact of reclaimed water.
- Water usage practices including the current usage of reverse osmosis as a means of water purification.
- Methods of reducing TDS in the treatment process.

The final report must be submitted to EPA within ninety (90) days of issuance of this permit. This report should incorporate key findings as well as a discussion and proposal of BMPs. If the reports findings indicate that the elevated levels cannot reasonably be reduced by the permittee or that the reduction would have a net negative impact on environmental wellness, indicate that analysis in the report.

If the findings are not substantial and do not thoroughly account for the elevated concentration of total dissolved solids, this permit may be reopened and effluent limits established for TDS.

## **VIII. SPECIAL CONDITIONS**

### **A. Biosolids**

Standard requirements for the monitoring, reporting, recordkeeping, and handling of biosolids in accordance with 40 CFR Part 503 are incorporated into the permit.

### **B. Pretreatment**

As described above, there are no industrial facilities discharging to the WWTP. Therefore, there are no pretreatment requirements in this permit.

### **C. Capacity Attainment and Planning**

The permit requires that a written report be filed within ninety (90) days if the average dry-weather wastewater treatment flow for any month exceeds 90 percent of the annual dry weather design capacity of the waste treatment and/or disposal facilities.

### **D. Development of an Initial Investigation TRE Workplan for Whole Effluent Toxicity**

In the event effluent toxicity is triggered from WET test results, the permit requires the permittee to develop and implement a Toxics Reduction Evaluation ("TRE") Workplan. For acute toxicity, unacceptable effluent toxicity is found when "Fail" is determined, as indicated

by a statistically significant difference between a test sample of 100 percent effluent and a control using a t-test. For chronic toxicity, unacceptable effluent toxicity is found in a single test result greater than 1.6 TU<sub>c</sub>, or when any one or more monthly test results in a calculated median value greater than 1.0 TU<sub>c</sub>. The draft permit also requires additional toxicity testing if a chronic toxicity monitoring trigger is exceeded. Within 90 days of the permit effective date, the permittee shall prepare and submit a copy of their Initial Investigation TRE Workplan (1-2 pages) for acute and chronic toxicity to EPA and ASEPA for review.

#### **E. Bypasses**

To prevent discharge of bypass wastewater that may exceed the permit limits, the Permittee shall divert any bypassed wastewater to the Santa Ynez Community Services District collection system through its dedicated conduit. The CSD collection system conveys wastewater to the Solvang wastewater treatment facility.

Bypasses may occur due to equipment failure or maintenance, a surge of influent or any inability to treat effluent in accordance with the conditions met in the permit. Wastewater bypassed by the Permittee shall not be discharged directly to surface waters or cause effluent limitations to be exceeded.

### **IX. OTHER CONSIDERATIONS UNDER FEDERAL LAW**

#### **Impact to Threatened and Endangered Species**

Section 7 of the Endangered Species Act of 1973 (16 U.S.C. § 1536) requires federal agencies to ensure that any action authorized, funded, or carried out by the federal agency does not jeopardize the continued existence of a listed or candidate species, or result in the destruction or adverse modification of its habitat.

EPA reviewed a List of Endangered, Threatened, and Candidate Species that may occur in the vicinity of the wastewater treatment facility located on Zanja de Cota Creek, Santa Barbara County, California, provided by the Ventura Fish and Wildlife Office.

The following eight Threatened and Endangered Species are present in Santa Barbara County, California, according to the latest information from the United States Fish and Wildlife Service's Ventura Office.

**Birds:** Least Bell's Vireo (*Vireo bellii pusillus*), Southwestern willow flycatcher (*Empidonax traillii extimus*).

**Amphibians:** Arroyo Toad (*Bufo Californicus*), California Red-legged Frog (*Rana aurora draytonii*), California Tiger Salamander (*Ambystoma californiense*)

**Invertebrates:** Vernal pool Fairy Shrimp (*Branchinecta lynchi*), Longhorn Fairy Shrimp (*Branchinecta longientenna*)

**Plants:** Contra Costa goldfields (*Lasthenia conjugens*).

Of the two birds listed, none has any nexus with Zanja de Cota Creek, beyond speculative incidental contact.

Of the two invertebrates listed, none has any nexus with Zanja de Cota Creek, beyond speculative incidental contact.

The one plant listed does not have any nexus with Zanja de Cota Creek, beyond speculative incidental contact.

Of the three amphibian species listed, the Arroyo Toad is found only in Santa Ynez River tributaries upstream of Lake Gibraltar, and thus has no nexus beyond speculative incidental contact with the Zanja de Cota Creek, which is a tributary that is significantly downstream of Lake Gibraltar. The California Tiger Salamander's habitat and breeding practices are specific to fishless vernal pools and thus has no nexus beyond speculative incidental contact with Zanja de Cota Creek. The California Red-legged Frog, while found in other tributaries to the Santa Ynez River, is not known in the literature to be present in the Zanja de Cota Creek, and thus has no nexus beyond speculative incidental contact with Zanja de Cota Creek.

Additionally, three studies by the Chumash Environmental Office, conducted in 2000, 2003, and again in 2008/2009 all indicated the complete absence of the California Red-Legged Frog from the east and west forks of the Zanja de Cota Creek. These studies were conducted in accordance with the standard methods used for a protocol level study according to the United States Fish and Wildlife Service (USFWS) guidance. Copies of all three surveys have been placed in the administrative record and are available upon request.

This permit authorizes the discharge of tertiary treated sanitary wastewater into Zanja de Cota Creek which, as outlined above, is not habitat for the aforementioned threatened and endangered species. The draft permit contains provisions for monitoring conventional pollutants, toxic chemicals, and nonconventional pollutants, in compliance with Federal and State of California Water Quality Standards, to ensure an appropriate level of quality of water discharged by the facility. Re-opener clauses have been included should new information become available to indicate that the requirements of the permit need to be changed.

In considering all information available during the drafting of this permit, EPA believes that a No Effect determination is appropriate for this federal action. A copy of the draft fact sheet and permit will be forwarded to the Ventura Field Office of the United States Fish and Wildlife Service for review and comment prior to and during the 30-day public review period.

## **X. STANDARD CONDITIONS**

### **A. Reopener Provision**

In accordance with 40 CFR 122 and 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards.

### **B. Standard Provisions**

The permit requires the permittee to comply with EPA Region IX Standard Federal NPDES Permit Conditions, dated July 1, 2001.

## **XI. ADMINISTRATIVE INFORMATION**

### **A. Public Notice (40 CFR 124.10)**

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to an NPDES permit or application.

### **B. Public Comment Period (40 CFR 124.10)**

Notice of the draft permit will be placed in a daily or weekly newspaper within the area affected by the facility or activity, with a minimum of 30 days provided for interested parties to respond in writing to EPA. After the closing of the public comment period, EPA is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

### **C. Public Hearing (40 CFR 124.12(c))**

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if EPA determines there is a significant amount of interest expressed during the 30-day public comment period or when it is necessary to clarify the issues involved in the permit decision.

### **D. Water Quality Certification Requirements (40 CFR 124.53 and 124.54)**

For States, Territories, or Tribes with EPA approved water quality standards, EPA is requesting certification from the affected State, Territory, or Tribe that the proposed permit will meet all applicable water quality standards. Certification under section 401 of the CWA



shall be in writing and shall include the conditions necessary to assure compliance with referenced applicable provisions of sections 208(e), 301, 302, 303, 306, and 307 of the CWA and appropriate requirements of Territory law.

## **XII. CONTACT INFORMATION**

Comments submittals and additional information relating to this proposal may be directed to:

Jamie Marincola  
415-972-3520  
Marincola.JamesPaul@epa.gov

EPA Region IX  
75 Hawthorne Street (WTR-5)  
San Francisco, California 94105

## **XIII. REFERENCES**

EPA. 1991. *Technical Support Document for Water Quality-based Toxics Control*. Prepared by EPA, Office of Water Enforcement and Permits, in March 1991. EPA/505/2-90-001.

EPA. 1996. *Regions IX & X Guidance for Implementing Whole Effluent Toxicity Testing Programs*, Interim Final, May 31, 1996.

EPA. 2002a. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* - Fifth Edition. Office of Water, EPA. EPA-821-R-02-012.

EPA. 2002b. *National Recommended Water Quality Criteria*. Office of Water, EPA. EPA-822-R-02-047.

EPA. 1996. *U.S. EPA NPDES Basic Permit Writers Manual*. EPA. EPA-833-B-96-003.

NPDES Permit Application Forms: EPA General Form 1, dated December 8, 2008, Standard Form 2A, dated December 8, 2008 and 2E dated December 8, 2008.

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40 CFR Parts 122, 124, and 133.

EPA Technical Support Document for Water Quality-Based Toxics Control dated March, 1991.

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Assessment of Effects of Treated Wastewater Effluent on Aquatic Habitats. Chumash Casino Consolidation Project Santa Barbara County, California. Prepared by Analytical Environmental Services (AES). March 2002.

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Environmental Assessment For Bingo/Casino/Administration Building & Parking Garage Santa Ynez Indian Reservation, Santa Ynez, California. Prepared by John Wallace & Associates (JWLA). October 2000

California Red-Legged Frog Site Assessment East and West Fork of the Zanja de Cota Creek, Santa Ynez Chumash Reservation. Prepared by Santa Ynez Chumash Environmental Office. September 2003.

Water Quality Control Plan. Central Coast Region. September 1994.

Red-Legged Frog (CRF) Species Survey Report for Chumash Reservation. 2009.

United States Fish and Wildlife Service, Ventura Field Office Web Site: [www.ventura.fws.gov](http://www.ventura.fws.gov)

The California Department of Health Care Services. *California Health Laws Related to Recycled Water: "The Purple Book:" Excerpts from the Health and Safety Code, Water Code, and Titles 22 and 17 of the California Code of Regulations.* June 2001.